

AMENDMENTS IN THE CLAIMS:

1. (Currently Amended) An energy converter comprising:
a heat source for emitting electromagnetic radiations; and
a radiation cut portion for cutting down infrared radiations,
of which the wavelengths are longer than a predetermined
wavelength,

wherein the radiation cut portion is a woven or knitted mesh
of metal wires with at least portions of the metal wires being
bended to form an intertwined structure having openings, the
openings of the woven or knitted mesh having an aperture size that
is smaller than the predetermined wavelength.

2. (Original) The energy converter of claim 1, wherein the
openings have a substantially square shape, each side of which is
shorter than 1 μ m.

3. (Original) The energy converter of claim 1, wherein the
metal wires have a diameter of 2 μ m or less.

4. (Previously Presented) The energy converter of claim 1,
wherein the metal wires are made of a refractory material having a
melting point higher than 2,000 K.

5. (Original) The energy converter of claim 4, wherein the
refractory material is at least one material selected from the
group consisting of tungsten, molybdenum, rhenium, tantalum and
compounds thereof.

6. (Previously Presented) The energy converter of claim 1, wherein the heat source is made of tungsten or a tungsten compound and operates at a temperature of 2,000 K or more.

7. (Previously Presented) The energy converter of claim 1, wherein the radiation cut portion is a stack of woven or knitted metal wire meshes, and

wherein the stack of woven or knitted meshes is thick enough to limit the emission of the electromagnetic radiations with the predetermined wavelength.

8. (Previously Presented) The energy converter of claim 1, wherein the predetermined wavelength is 780 nm.

9. (Currently Amended) A method of making an energy converter, the method comprising the steps of:

preparing a heat source that emits electromagnetic radiations;

preparing a radiation cut portion that cuts down infrared radiations, of which the wavelengths are longer than a predetermined wavelength; and

arranging the radiation cut portion such that the radiation cut portion faces at least one side of the heat source, from which the electromagnetic radiations are emitted,

wherein the radiation cut portion is a woven or knitted mesh of metal wires with at least portions of the metal wires being bended to form an intertwined structure having openings, the openings of the woven or knitted mesh having an aperture size that is smaller than the predetermined wavelength.

10. (Original) The method of claim 9, wherein the step of preparing the radiation cut portion includes the step of

processing the metal wires while applying tensile stress to the wires.

11. (Original) An apparatus comprising:
the energy converter of claim 1;
a translucent bulb for shielding the energy converter from the air; and
means for supplying electrical power to the heat source included in the energy converter.

12. (Original) The apparatus of claim 11, wherein the apparatus functions as an illumination source.

13. (Currently Amended) A radiation cut member for cutting down infrared radiations, of which the wavelengths are longer than a predetermined wavelength,

wherein the radiation cut member is a woven or knitted mesh of metal wires with at least portions of the metal wires being bended to form an intertwined structure having openings, the openings of the woven or knitted mesh having an aperture size that is smaller than the predetermined wavelength.